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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,973	04/05/2004	Brian W. Cho	68.0476	2972

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SCHLUMBERGER RESERVOIR COMPLETIONS
14910 AIRLINE ROAD
ROSHARON, TX 77583

EXAMINER

SMITH, MATTHEW J

ART UNIT	PAPER NUMBER
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3637

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/708,973	CHO ET AL.	
	Examiner	Art Unit	
	Matthew J. Smith	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-9,15-28,32-44,46-49,51-53 and 55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-44,46-49,51-53 and 55 is/are allowed.
- 6) ☒ Claim(s) 1,2,9,15-17,21,22,27 and 28 is/are rejected.
- 7) ☒ Claim(s) 6-8,18-20 and 23-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, 15, 21, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Gore (3067819).

Gore discloses (col. 5, lines 21-41) energizing a coil spring 49; causing the spring to expand using the spring potential energy alone; twisting the spring ("tightly wound"); and elastomeric sealing sleeve 48 circumscribing the spring.

Claims 16, 17, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by McCullough et al. (3314479).

McCullough et al. disclose forming a helical groove 14 in a tubular member 10 to form an elastic body or spring: energized before run in, released downhole without receiving additional energy, and recovers its original shape after distortion (inherent when helically slotting a metal tube); expands in a well to form an annular barrier; and has a longitudinally varying profile to form a spring.

Allowable Subject Matter

Claims 32-44 46-49, 51-53, and 55 are allowed.

Claims 6-8, 18-20, and 22-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments, see page 8, filed 18 December 2006, with respect to the rejections of claims 1, 6-9, 15, 21, 27, 28, 32, 49, and 53 under 35 U.S.C. 102 anticipated by Retz, Mouton, and Gore, respectively, have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new rejection is made in view of Gore. The examiner contends Gore's extender tool allows the release of the spring's potential energy without transferring additional energy since no energy transfer from the tool is disclosed.

The argument discussing McCoullough et al. deficient the plug having any spring-like properties is not convincing. Since applicant's claim defines a helical groove in a tubular member that expands to form a barrier and recites "spring", the examiner believes naming this structure a spring or a body is a matter of semantics. While the McCoullough et al. body is not disclosed as storing potential energy, the reference hints at some type of spring-like feature, i.e., "the ends ... urged strongly toward each other". This disclosure, to contracting, is considered sufficient to anticipate claim 16.

Art Unit: 3672

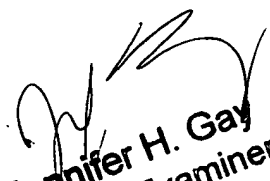
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 571-272-7034. The examiner can normally be reached on T-F, 8-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Bagnell
Supervisory Patent Examiner
Art Unit 3672

MJS *mjs*
15 February 2007


Jennifer H. Gay
Primary Examiner